

## REMARKS

Reconsideration and withdrawal of the rejections made in the mentioned Office Action are respectfully requested, in view of the foregoing amendments and the following remarks:

### Summary of Amendments

By the foregoing amendment, claims 2-20 will be canceled without prejudice or disclaimer of the subject matter recited therein, claim 1 will be amended, and claims 21-32 will be added. Of the pending claims, claims 1, 21 and 28 are independent claims.

Support for the amendments to the claims can be found throughout Applicants' specification and, particularly, in Applicants' specification, at paragraphs [24] to [30], and Applicants' examples.

The specification has also been amended herein to explicitly include the language of the claims.

It is noted that the amendments to the claims are without prejudice or disclaimer to the prosecution of the claims pending prior to the present response in one or more divisional and/or continuation applications. Furthermore, any amendments to the claims which have been made in this Amendment, and which have not been specifically noted to overcome a rejection based on prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

**Claim of Priority**

The Office Action has not acknowledged Applicants' claim of priority under 35 U.S.C. 119 of Korean Application No. 10-2002-0054650 nor receipt of the certified copy. Therefore, Applicants respectfully request that the Examiner acknowledge the claim of priority and receipt of the certified copy, which was filed March 31, 2004, in the next communication from the Patent and Trademark Office.

**Response To Rejection Under 35 U.S.C. 112, First Paragraph**

Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, because it is asserted that the specification, while being enabling for treating dementia and impairment of learning and memory and cognitive function, does not reasonably provide enablement for preventing dementia and impairment of learning and memory and cognitive function.

In response, Applicants respectfully submit that Applicants' specification should be considered to be enabling for both treatment and prevention. For example, Applicants note that mice trials may be used where the results are representative of human results. However, without expressing agreement and/or acquiescence to the rejection of record and to advance prosecution of the application, Applicants have deleted prevention from the claims.

Accordingly, this ground of rejection should be withdrawn.

**Rejection Under 35 U.S.C. 102(b)**

Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Rydel et al. (hereinafter "Rydel"), U.S. Patent No. 5,707,821. In this ground of rejection, it is asserted, amongst other contentions, that Rydel discloses compositions (column 19, lines 10-65) that can include minocycline. Moreover, the rejection points to Example 5 and Table 3 of Rydel for pretreatment of human cortical neurons with a series of PLA<sub>2</sub> inhibitors including minocycline) and subsequent exposure of the pretreated human cortical neurons to A $\beta$ 1-40 at concentrations of 90nM to 100  $\mu$ M in ddH<sub>2</sub>O in order to determine the effects of the compounds on neuronal survival. The rejection contends that Table 3 of Rydel demonstrates that minocycline A $\beta$  peptide anticipates Applicants' compositions containing minocycline. Therefore, the rejection contends that compositions are known that contain minocycline and therefore Applicant's compositions are anticipated by the prior art.

In response, Applicants note that Rydel discloses that the inhibition of neurodegenerative toxic effect caused by A $\beta$  protein is controlled by PLA<sub>2</sub>, cytokine release, TNF $\alpha$ . On the other hand, the amended claims are based on the findings that the administration of minocycline composition decreases the brain cell toxicity, the impairment of simple memory and the impairment of spatial memory, by inhibition of C-terminal protein.

Rydel shows neuroprotective effect data only in cell culture model. On the other hand, the subject invention is based on the experimental results in differentiated neurocells and dementia-induced animal model. The results shown in PC12 treated with NGF are very similar to the results of human cells because NGF treatment makes PC12 cells differentiate into neurocells, and this differentiation is also verified by other researchers.

Rydel does not teach or suggest a minocycline composition for treatment of dementia by decreasing of brain cell toxicity, by decreasing of the impairment of simple memory and by decreasing of the impairment of spatial memory induced by C-terminal protein.

Applicants note that the rejection indicates that generally a preamble does not accord any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness, but instead, the process steps or structural limitations are able to stand alone.

In response, Applicants respectfully submit that in the instant situation the claim preamble, when read in the context of the entire claim, recites limitations of the claim, and gives life, meaning, and vitality to the claim, and should be construed as if part of the claim. For example, MPEP 2111.02, Rev. 2 May 2004, beginning at page 2100-50 discusses case law pertaining to preambles given weight, and references a case (*Jansen v. Rexall Sundown, Inc.*, 342 F.3d 1329, 1333, 68 USPQ2d 1154, 1158 (Fed. Cir. 2003)) wherein, "In considering the effect of the preamble in a claim directed to a method of treating or preventing pernicious anemia in humans by administering a certain vitamin preparation to "a human in need thereof," the court held that the claims' recitation of a patient or a human "in need" gives life and meaning to the preamble's statement of purpose."

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Accordingly, for at least the reasons set forth above, claim 1 and newly-added method claims 21-32 should be indicated to be allowable over Rydel, and the anticipation rejection should be withdrawn.

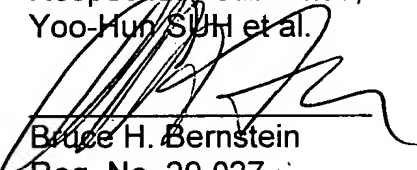
### CONCLUSION

In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the objections and rejections of record, and allow each of the pending claims.

Applicants therefore respectfully request that an early indication of allowance of the application be indicated by the mailing of the Notices of Allowance and Allowability.

Should the Examiner have any questions regarding this application, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,  
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